DOCUMENT RESUME

ED 172 995 **RC 011 453**

AUTHOR	Wilson, Roger; Salas, Dennis
TITLE	A Management and Information System for the Dine Teacher Corps Program "78".
INSTITUTION	Northern Arizona Univ., Flagstaff.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	Dec 78
GRANT	G007803217
NOTE	45p.; Document prepared by the Dine Teacher Corps Project
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	American Indian Education; *American Indians; Bilingual Education; Bilingual Teachers; Community Characteristics; Cross Cultural Training; *Decision Making; Educational Facilities; Educational Finance; Elementary Education; Inservice Education; Instructional Programs; Management; *Management Information Systems; Personnel; *Program Planning; *Teacher Education; Tribes
IDENTIFIERS	*Dine Teacher Corps Program AZ; Kaibeto Boarding School AZ; Leupp Boarding School AZ; *Navajo Nation; Northern Arizona University

ABSTRACT

The overall objective of the Dine Teacher Corps Project is to demonstrate the effectiveness of an interdisciplinary approach to the development and implementation of a bilingual/multicultural training and inservice training program for educators who will be cognizant of and responsive to the unique educational needs of the Indian child. The five year project, begun in 1978, is designed as a cooperative program between Northern Arizona University, Dine Teacher Corps, and two Bureau of Indian Affairs Navajo boarding schools (Kaibeto and Leupp). In order to perform the three phases of activities required by the project (planning, training programs, demonstration and dissemination), a Management Information System (MIS) has been developed and implemented to provide adequate, accurate, and timely information for decision making, reporting accomplishment, and using resources effectively. The MIS is an integrated information system comprised of seven subsystems: finance, school communities, management, facilities and equipment, personnel, students, and instructional programs. Diagrams, flow charts, models, and tables illustrate details of the MIS program design. (NEC/BR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

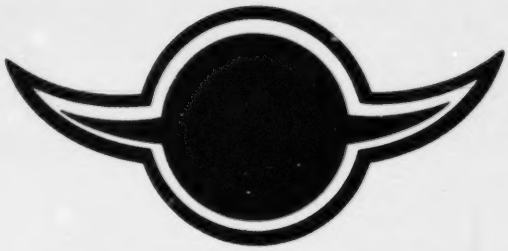
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Roger Wilson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED172995



diné

TEACHER CORPS PROJECT MANAGEMENT INFORMATION SYSTEM NORTHERN ARIZONA UNIVERSITY

RC011453

A MANAGEMENT AND INFORMATION SYSTEM FOR THE DINÉ TEACHER CORPS PROGRAM "78"

December, 1978

ROGER WILSON
PROJECT DIRECTOR

DENNIS SALAS
DOCUMENTOR / EVALUATOR

NORTHERN ARIZONA UNIVERSITY
P.O. BOX 6002
FLAGSTAFF, ARIZONA 86011
(602) 523 - 2009

TABLE OF CONTENTS

Section	Page
Acknowledgements	i
Preface	ii
Introduction	1
MIS General Design	3
Subsystem Description	
Finance Subsystem Data File	6
Community Subsystem Data File	10
Management Subsystem Data File	14
Facilities Subsystem Data File	18
Staff Data File	22
Student Subsystem Data File	26
Instructional Program Subsystem Data File	30
Data Collection, Storage, and Retrieval Considerations	33
Tools and Techniques of Data Collection	35

LIST OF FIGURES

Figure	Title	Page
Figure 1.	Dine' MIS Model	3
Figure 2.	Finance File	8
Figure 3.	Community File	12
Figure 4.	Management File	16
Figure 5.	Facility File	20
Figure 6.	Staff Data File	24
Figure 7.	Student File	28
Figure 8.	Instructional Program File	30

LIST OF TABLES

Table	Title	Page
Table 1.	Finance Data File Categories, Data Items, and Users	9
Table 2.	Community File Categories, Data Items, and Users	13
Table 3.	Management Data File Categories, Data Items, and Users	17
Table 4.	Facility Data File Categories, Data Items, and Users	21
Table 5.	Staff Data File Categories, Data Items, and Users	25
Table 6.	Student Data File Categories, Data Items, and Users	29
Table 7.	Instructional Programs File Categories, Data Items, and Users	31

ACKNOWLEDGEMENTS

Grateful acknowledgement is extended to the staff of the Diné Teacher Corps Project and to Dr. Mike Miles and to Dr. Sam W. Bliss for their work in developing this Management Information System.

Cover design by Cindy Sanko

Typescript prepared by Susan Daurelle

The material reported herein was prepared by Diné Teacher Corps Project under grant #G007803217 to Northern Arizona University from the United States Office of Education. Points of view or opinions expressed herein should not be construed as representing official Office of Education position or policy.

PREFACE

Teacher Corps, established by Congress in 1965, is a nationwide effort to strengthen the educational opportunities available to children in areas having concentrations of low income families, to encourage colleges and universities to broaden their program of teacher preparation, and to encourage institutions of higher education and local educational agencies to improve programs of training and retraining for teachers, their aides, and other educational personnel.

AMERICAN INDIAN TEACHER CORPS PROJECTS:

The Teacher Corps was one of the first federally funded programs to be concerned with the training of American Indians as teachers of their own people. There are now Teacher Corps projects operating in and around approximately 20 American Indian communities. A special goal of each American Indian project is to attract American Indian graduates to reservation areas and to prepare and certify them as members of the teaching profession.

NORTHERN ARIZONA UNIVERSITY NAVAJO & HOPI TEACHER CORPS:

One of the first American Indian Teacher Corps Projects began in the summer of 1968 with interns serving in schools on Navajo and Hopi lands while receiving professional training from Northern Arizona University, Flagstaff, Arizona.

Since then, additional Teacher Corps projects have had interns working from one to ten schools on or near American Indian lands in Alaska, Idaho, Kansas, Montana, North Dakota, South Dakota, Utah, Washington, Wisconsin and Wyoming.

PROGRAM 1978 REPRESENTS A MAJOR SHIFT IN TEACHER CORPS:

Under new legislation, Teacher Corps programs are now five years in length, and must provide training for all educational personnel in the project.

The three major phases of activities are:

Phase One - Planning (1978-79)

Phase Two - Training Programs (1979-81)

Phase Three - Demonstration and Dissemination (1981-83)

The universities, local educational agencies, and elected representatives from the school community serviced by the program are offered the chance to work together, plan, and operate the five year programs for better training and utilization of teachers, teacher aides, and other educational personnel. The result is a demonstration project.

The Dine' Teacher Corps Program '78

This five year project provides a cooperative program between Northern Arizona University, Dine' Teacher Corps, and two Bureau of Indian Affairs schools: Kaibeto and Leupp Boarding Schools.

The overall objective of this project is to: DEMONSTRATE THE EFFECTIVENESS OF AN INTERDISCIPLINARY APPROACH TO THE DEVELOPMENT AND IMPLEMENTATION OF A BILINGUAL/MULTICULTURAL TRAINING AND IN-SERVICE TRAINING PROGRAM FOR EDUCATORS WHO WILL BE COGNIZANT OF AND RESPONSIVE TO THE UNIQUE EDUCATIONAL NEEDS OF THE INDIAN CHILD.

The project will serve the Local Education Agencies (LEA's) and the Indian communities, while enabling interns to fulfill the requirements of the Institute of Higher Education (IHE) (Northern Arizona University) for the Baccalaureate or Master of Arts Degree in Bilingual/Multicultural Education.

Project Staff

Director: Roger Wilson

Inservice Coordinator: Mary Ann Smith

Program Developer: Martha Shideler

Documentor/Evaluator: Dennis Salas

Secretary: Susan Daurelle

Carol Miller

INTRODUCTION

Purpose and Scope

The pressing demand for adequate, accurate and timely information has prompted the development and implementation of a Management Information System (MIS) in the Diné Teacher Corps Program. In directing the Program's efforts toward the development of a Management Information System, it was recognized that a need existed to provide appropriate information for decision-making, reporting accomplishments, and using resources effectively and efficiently. Moreover, it was recognized that the establishment of a Management Information System to satisfy planning and decision-making needs would be a tool for strengthening Program operations.

The primary purposes of the Management Information System for the Northern Arizona University Diné Teacher Corps Program "78" are:

1. To provide basic items of information needed for planning and decision-making by the Diné Teacher Corps Program "78".
2. To provide for the feedback of meaningful information and analysis to the cooperating local educational agency (LEA).
3. To produce feedback information to the institution of higher education (IHE).
4. To provide feedback information to the National Teacher Corps office and the contractors.
5. To provide for the comparability of information between participating educational agencies.
6. To lessen duplication in data collection, processing, and dissemination.
7. To produce data for research purposes.
8. To improve communication, cooperation, and unification among participating agencies, through more efficient transmission of information.
9. To serve to improve the public image and confidence through more and better information.

The Diné Teacher Corps Program "78" Management Information System (MIS) Design:

The diagram (Figure 1) of the Dine' MIS model illustrates the general concept inherent in the system. It indicates some of the basic functions of the system and shows the flow, in general, of information through the system. The general system's design is structured in four major sections: the source of information, the processing procedures, the data files, and the reporting section.

The sources of information section includes agencies that provide the input information for the Management Information System. This input can be the initial file building for the update functions of the data files. The physical form of the input documents may vary, depending upon the type of data collection documents. The simplest form could be a manual form and the most sophisticated could be a computer print-out.

The reporting (output) section is the generation of reports required of the system. The Management Information System stores information in the data files, through processing, provides the desired reports. Thus, reports, standard or special, contain basic data derived from the data files.

System Description

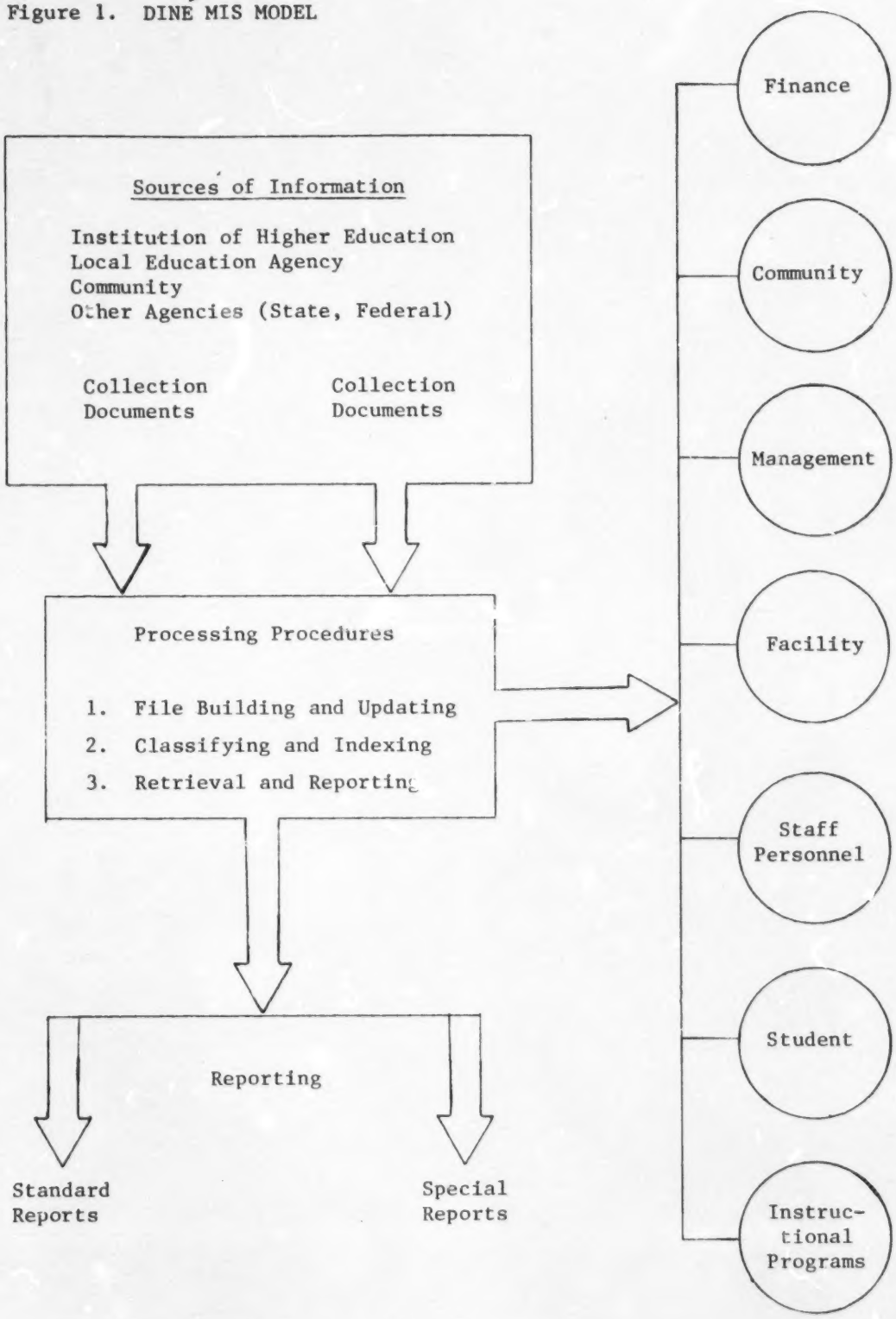
The system is an integrated information system, and as such, can utilize more than one group of data, each of which has a discrete purpose or content. Each of these groups of data can be collected, maintained and utilized separately, or can also be utilized in an integrated or combined fashion. The information contained in these data files, although distinct for each file, have a specific relationship to each other and thus have an effect upon the information needs that the system as a whole is designed to serve.

The seven distinct types of data form the seven subsystems that make up the Management Information System. In most situations they receive data specific to their areas. However, when the data are used from more than one subsystem, the integration of information occurs.

The Management Information System is set up according to the Numerical Arrangement which is strictly an arrangement by numbers with no application of the principles of classification. It is usually confined to filing systems where a running or serial number is given to each subsystem, document or file, and thus the complete numerical system comprises roughly a chronological arrangement of documents in order of receipt, or of files in order of opening.

If a filing system has not been carefully devised, more time is wasted seeking information than recording it. The time factor is not the only one to be considered. Well marshalled facts and information create confidence and help to deal efficiently with inquiries.

Figure 1. DINE MIS MODEL



The Dine' Management Information System is organized according to the following subsystems. The numbers for the system are arranged as indicated.

Part One: Finance Subsystem 1000-1999

The Finance Subsystem for the Program in reality exists within the IHE and LEA. Data from the output reports of the IHE and LEA provide information to the Program relating to receipts and expenditures. Essential and satisfactory data needed by the Program is cooperatively organized by the IHE and LEA. Northern Arizona University, a State Agency, is the recipient of the grant. The IHE receives the funds on behalf of the LEA, which is a Bureau of Indian Affairs school. Both the LEA and the National Teacher Corps are Federal Agencies, while the recipient of the grant is a State Agency.

Part Two: Community Subsystem 2000-2999

The Community Subsystem serves the Program by providing data relating to the LEA community in the target schools. Descriptive characteristics of the community are essential for effective communication and cooperation with the LEA community. Basic information to be stored in this subsystem includes: (1) location (map) (2) population data (3) social/economic data and political data (4) needs assessment data and (5) community action plans.

Part Three: Management Subsystem 3000-3999

Data stored in the Management Subsystem relates to the management process for the Northern Arizona University Dine' Teacher Corps Program '78. The data is stored in the form of management networks, schedules, reports, evaluations of progress and future plans. The management data is used by the Project Director to plan, organize and control Program activities.

Part Four: Facilities Subsystem 4000-4999

The purpose of the Facilities Subsystem is to collect and maintain data which will provide a description of the physical properties of facilities and equipment essential to the Program's operation. Thus, the Program will have data from the institution of higher education (IHE) and the local educational agencies (LEA) in this subsystem facility. This data will provide information about the site and location, buildings, and equipment that can be used along with the educational data in the other six files.

Part Five: Staff Personnel Subsystem 5000-5999

The purpose of this subsystem is to collect and maintain information concerning all staff personnel who are involved with the Program. Thus, data on personnel includes: (1) Project staff (2) Community consultants (3) LEA personnel - both professional and classified and (4) IHE personnel.

There are a number of common data elements for all personnel. However, certain specific elements apply to each of the four personnel areas.

Part Six: Student Subsystem 6000-6999

The student file contains information on: (1) graduate interns (2) undergraduate volunteers (3) paraprofessionals (4) professional teachers and (5) community members. Included are demographic data, training program affiliation, evaluation reports, special reports, etc.

Part Seven: Instructional Programs Subsystem 7000-7999

This subsystem is designed to provide information about the Program's instructional program. Included are the following components: (1) Graduate intern program (2) Inservice program for paraprofessionals (aides) and professional teachers (3) Community training program (4) Planning for graduate program in bilingual education and (5) others.

Part Eight: Data Collection, Storage and Retrieval Considerations

Data collection, storage and retrieval concerns are internal system functions. The concepts and principles described in this section apply to all of the subsystems that make up the MIS.

PART ONE

Finance Subsystem Data File

Finance File Requirements

Information in the Finance Subsystem is essential to the management of the fiscal affairs of the Diné Teacher Corps Program '78. Fiscal information is required in order to:

1. Record funds received
2. Plan expenditures
3. Control expenditures
4. Assure that funds are expended in accordance with budget appropriations

Information Requirements

Fiscal information is required by the Project on a continuous and regular basis from the LEA, IHE, Community Council and the Policy Board.

1. Records of expenditure forms
2. Monthly receipt and expenditure reports by the Project budget format
3. Special ledgers and registers essential for invoices, checks, receiving reports, etc.
4. Quarterly, semi-annual, and annual reports

Input Sources

Financial information is essential for planning and maintaining fiscal accountability of Project funds. The IHE provides the Project with financial accounting services. This requires that the Project adopt the IHE's financial accounting policies, rules, regulations, and forms.

Typical input sources are:

1. Receipts
2. Expenditure forms
   a. Purchase Requisitions
   b. Purchase Orders
   c. Invoices
   d. Travel Claims

3. Computer Printouts

Output Documents

The IHE accounting system provides periodic output records for use by the Project. Some of these are:

1. Monthly Receipt Reports
2. Monthly Expenditure Reports
3. Various listings of expenditure forms, i.e., Purchase documents, invoices, etc.
4. Annual expenditure reports

Figure 2. DIME FINANCE FILE

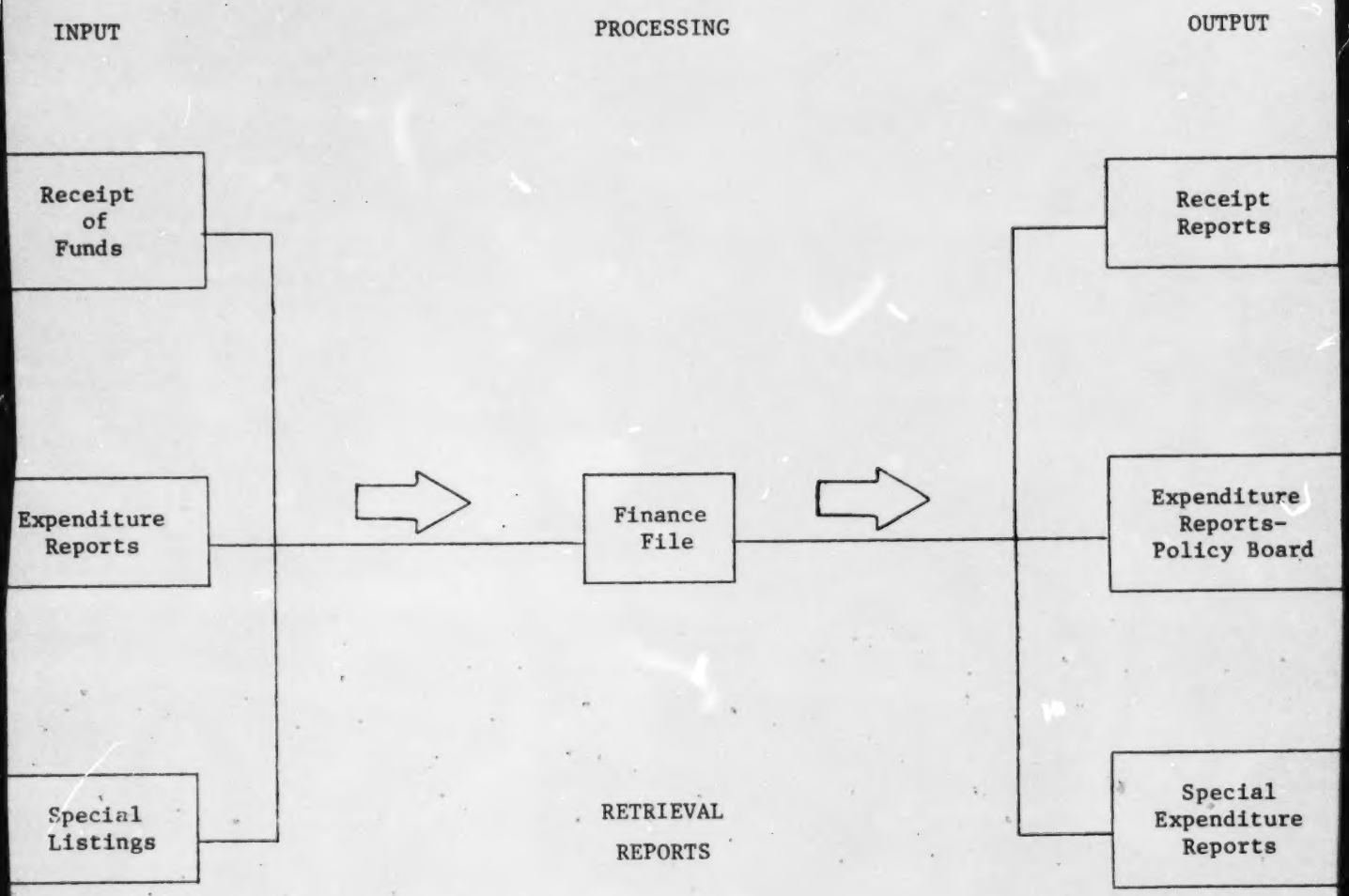


Table 1. Finance Data File Categories, Data Items, and Users

Data Items by Category	Users						
	T.C. Proj.	Natl. T.C.	T.C. Network	BIA LEA	IHE	Comm.	Other
Receipts							
Teacher Corps Project Funds	X	X	X		X		
Totals	X	X	X		X		
Expenditures							
Personnel	X	X		X	X	X	
Fringe Benefits	X	X		X	X	X	
Travel	X	X		X	X	X	
Equipment Purchase Instructional	X	X		X	X	X	
Supplies Instructional	X	X		X	X	X	
Contractual	X	X		X	X	X	
Other	X	X		X	X	X	
Totals	X	X		X	X	X	
Personnel	X	X		X	X	X	
Fringe Benefits	X	X		X	X	X	
Travel	X	X		X	X	X	
Equipment Purchase Instructional	X	X		X	X	X	
Supplies Instructional	X	X		X	X	X	
Contractual	X	X		X	X	X	
Other	X	X		X	X	X	
Totals	X	X		X	X	X	
Indirect Costs	X	X		X	X	X	
Totals	X	X		X	X	X	

PART TWO

Community Subsystem Data File

Community File Requirements

This subsystem data file contains several categories of information about the LEA community essential to the operation of the Project. The need for community information is created because:

1. The Project is required to develop and implement a community council.
2. Successful attainment of Teacher Corps goals/objectives requires involvement and cooperation from the community.

Information Requirements

Information in this file includes the following categories:

1. Community Council Constitution and By-Laws
2. Community characteristics
3. Needs assessment
4. Community Action programs
5. Community Council Meeting minutes

Input Sources

Community Information is obtained from a variety of sources and at different times of the year. Some of the sources are:

1. Reservation records
2. Census and population surveys
3. Community people
4. Chapter houses
5. Bureau of Indian Affairs
6. Data collected by interest surveys
7. Community groups, clubs, etc.
8. Teacher Corps Project Action plans
9. Evaluation and documentation procedures
10. Maps of Districts 1 and 5
11. Social Agencies

a. Bureau of Indian Affairs
b. Navajo Tribal Agencies

Output Documents

Data collected from the input is stored in the Community File for future retrieval and report preparation. Community File data is used for:

1. Day to day operations at the LEA
2. Monthly and quarterly reports
3. Special reports
4. Documentation and evaluation reports

Data Collection and Output Forms

Examples of the above.

Figure 3. COMMUNITY FILE

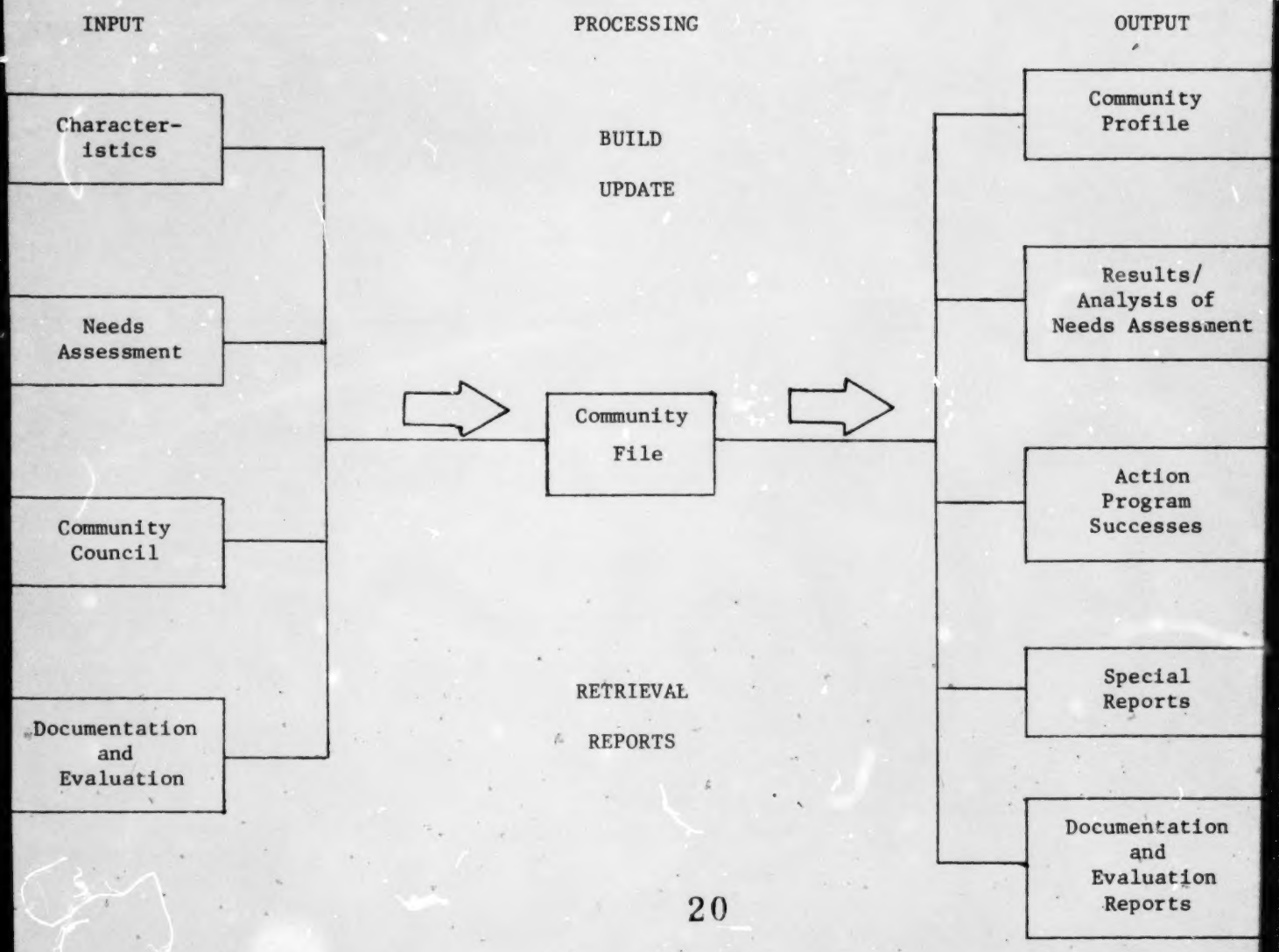


Table 2. Community File Categories, Data Items, and Users

Data Items by Category	Users					
	Proj.	Natl. T.C.	T.C. Network	LEA	Comm.	Other
Community Characteristics						
1. Population	X	X	X	X	X	
2. Social Levels	X			X	X	
3. Ethnic Population	X	X		X	X	
4. Business	X	X		X	X	
5. Economic Level	X	X		X	X	
6. Geographic Location	X	X	X	X	X	
Needs Assessment						
1. Description of Respondents	X	X			X	
2. Needs for Community Involvement	X	X	X		X	
3. Other Items Included on Survey	X	X			X	
Community Council Constitution and By-Laws						
Community Council Constitution meeting minutes						
Documentation and Evaluation						

PART THREE

Management Subsystem Data File

Management File Requirements

The Management Subsystem includes information essential to the overall administration of the Dine' Teacher Corps Program '78. The information is used to:

1. Plan program activities
2. Organize program operations
3. Allocate resources
4. Control operations
5. Achieve Project goals/objectives

Information Requirements

Requirements for information in this subsystem file include:

1. Periodic reports (weekly, monthly, quarterly, etc.)
2. Special one-time reports
3. Policy Board documents (minutes, constitution and by-laws)
4. Special reports and documents from outside agencies, such as National Teacher Corps, Teacher Corps Network, LEA, BIA, and Community
5. Documentation and evaluation of program goals/objectives
6. Re-planning documents

Input Sources

Management information is acquired from the various reports and documents resulting from Project planning, organizing, resource allocation and control activities. Some of the sources are:

1. Project budgets
2. Staffing and personnel records
3. Documentation and evaluation reports
4. Policy Board documents
5. LEA and IHE documents

Output Documents

Information stored in the management file will be used to prepare a number of output documents. Some of these are:

1. Progress reports
2. Impact reports
3. Updated management plans
4. Policy Board reports
5. Re-planning documents

Figure 4. DINE MANAGEMENT FILE

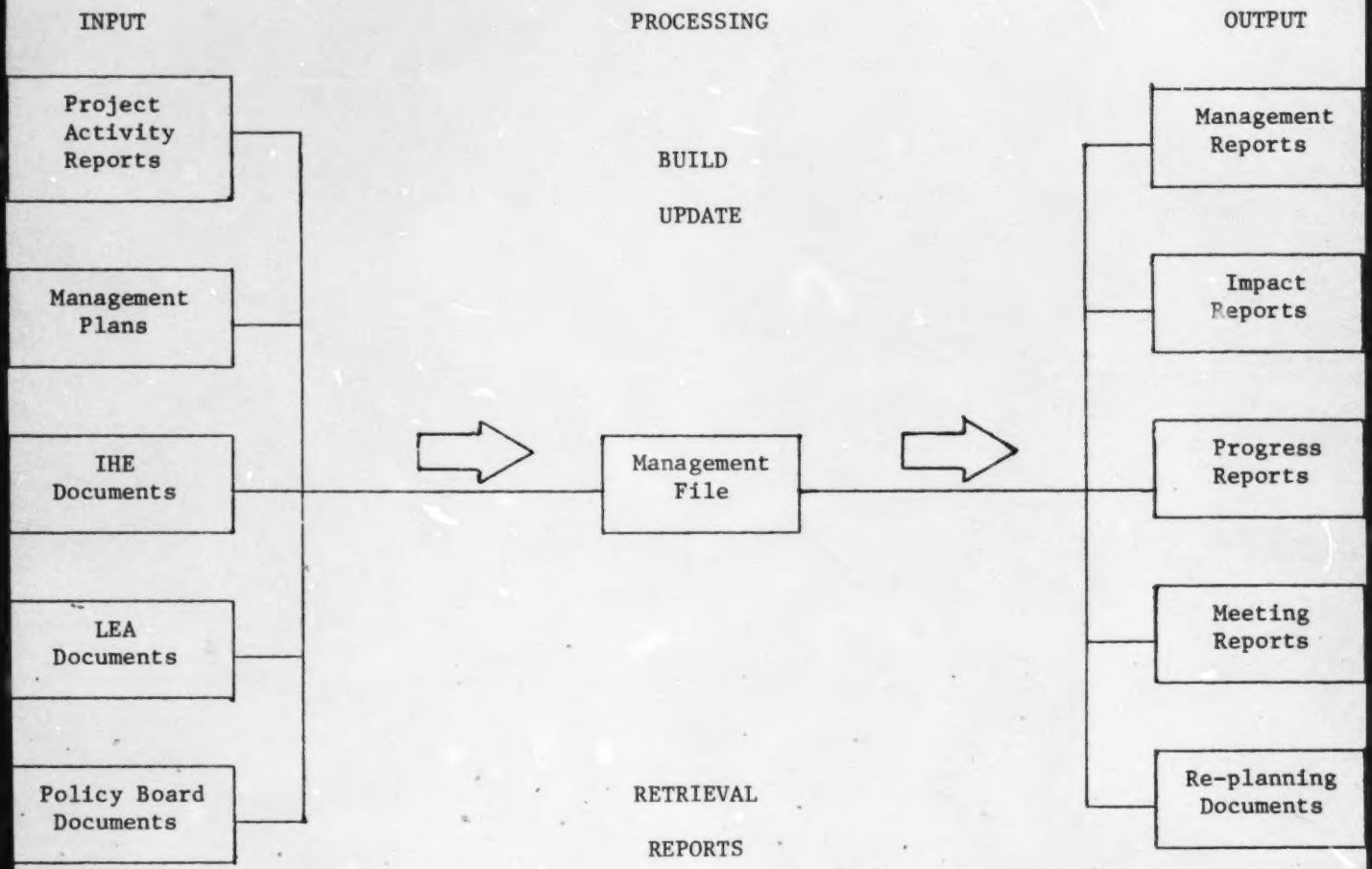


Table 3. Management Data File Categories, Data Items, and Users

Data Items by Category	Users						
	T.C. Proj.	Natl. T.C.	T.C. Network	BIA LEA	IHE	Comm.	Other
Activity Reports							
Objectives	X	X	X	X	X	X	
Activities	X	X	X	X	X	X	
Management Plans							
Time schedules	X	X		X	X	X	
Personnel	X	X		X	X	X	
Costs	X	X		X	X	X	
Activities	X	X		X	X	X	
IHE Documents	X	X	X	X	X	X	
LEA Documents	X	X	X	X	X	X	
Policy Board Documents	X	X	X	X	X	X	

PART FOUR

Facilities Subsystem Data File

This data file contains three categories of information relating to facilities. They are: Site, Building and Equipment.

Facilities File Requirements

Information relating to facilities is required to identify locations, building space and equipment utilized by the Project. This information is useful in planning visits, programs, and related Project activities, Federal and IHE requirements to maintain equipment inventories.

Information Requirements

Information from the Facility Subsystem Data File will be used to provide:

1. Inventory listings
2. Staff housing reports
3. Reports to IHE, LEA, National Teacher Corps, etcetera, relating to use of space and equipment

Input Sources

Facility information obtained from the LEA, IHE and Community by the completion of survey forms designed specifically to collect facility information. Sources are:

1. LEA Facility Survey Form
2. IHE Facility Survey Form
3. Purchase and receiving documents for equipment
4. Community Facility Survey Form

Output Documents

Facility data collected will be used to prepare inventory listings, records and specific reports. Output reports are:

1. Site location record

2. Building Space Inventory
3. Equipment Inventory

Data Collection and Output Reports

Examples of the above.

Figure 5. FACILITY FILE

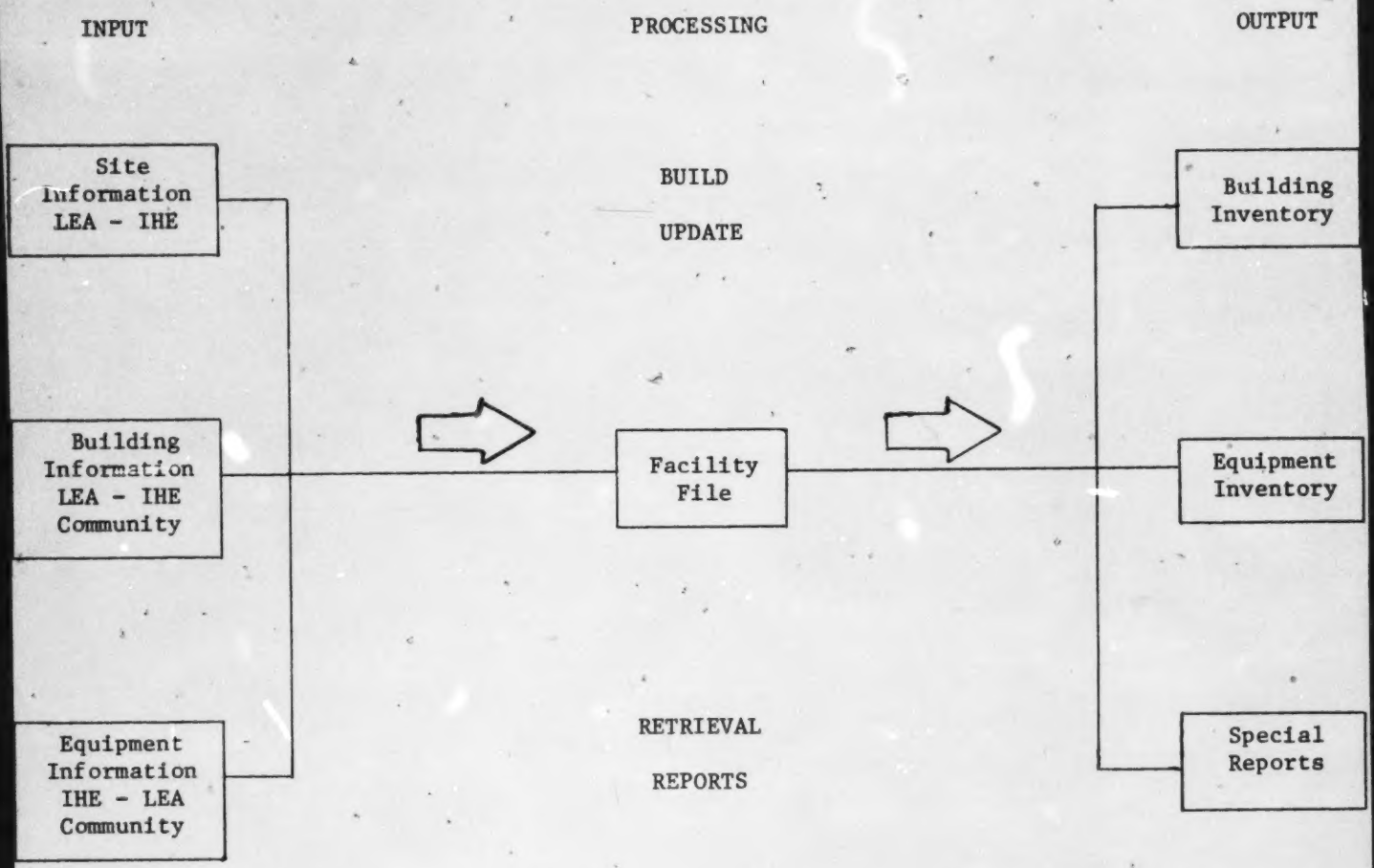


Table 4. Facility Data File Categories, Data Items, and Users

Data Items by Category	Users						
	T.C. Project	Natl. T.C.	T.C. Network	BIA LEA	IHE	Comm.	Other
Site (s)							
Location (Map)	X			X		X	
Use of site							
Building (s) - LEA, IHE, Community							
Number or Unit	X	X	X	X	X	X	
Address	X	X	X	X	X	X	
Availability of Building	X						
Fire Rating	X						
Kind of Building	X						
Ownership of Building	X						
Use of Building	X						
Supportative services in building	X						
	X						
Space (s) in building	X						
Equipment - LEA, IHE, Community							
Type of equipment	X	X					
Date acquired	X	X					
Use of equipment	X	X					
Inventory number	X	X					
Location of equipment	X	X					
Maintenance of equipment	X	X					

PART FIVE

Staff Data File

For this project "staff" includes:

1. Dine Teacher Corps staff
2. LEA staff
3. University professors
4. Consultants

Information in this data file encompasses:

1. Demographic
2. Academic training
3. Teaching experience
4. Business experience
5. Outside interests

Information Requirements

The information is needed in order to:

1. Describe the re-training program of the Project.
2. Plan and monitor the re-training program.
3. Assess the impact of the re-training,
4. Maintain records of program completion and credit earned.

Input Sources

Input information for this data file is acquired from several sources. Some are:

1. Special demographic forms
2. Course registration
3. Admission records
4. Grade reports
5. Transcripts
6. Professional vitas

7. Progress reports

Output Documents

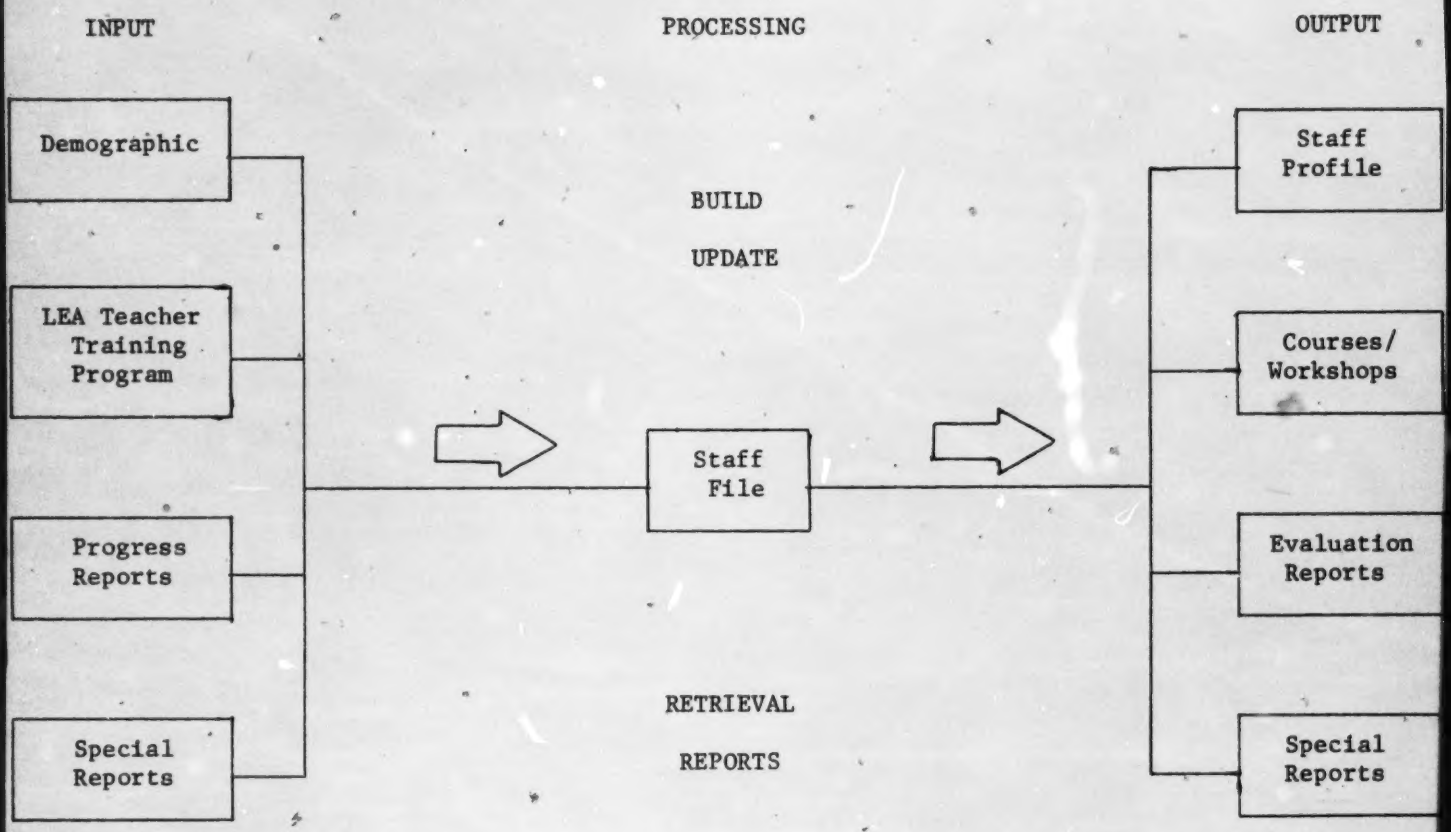
The information acquired from the input sources and stored in this file are used to prepare a number of output documents. Some of these are:

1. Re-training staff profile
2. Staff re-training summary reports
3. Course completion reports
4. Transcripts
5. Recommendations
6. Evaluation reports

Data Collection and Output Forms

Examples of the above - see Figure 6 and Table 5.

Figure 6. *STAFF DATA FILE



* 1. Diné Teacher Corps Staff
2. LEA Staff
3. University Professors
4. Consultants

Table 5. Staff Data File Categories, Data Items, and Users

Data Items by Category	Users						
	T.C. Project	Natl. T.C.	T.C. Network	BIA LEA	IHE	Comm.	Other
Demographic							
Name	X	X	X	X	X		
Address and Zip Code	X	X		X			
Telephone	X	X		X			
Social Security Number	X	X		X			
Ethnic Group	X	X		X			
Sex	X	X		X			
Marital Status	X	X		X			
Age and Date of Birth	X	X		X			
Degree (s)	X	X		X	X		
Previous Experience	X			X			
Teacher Certification	X	X		X	X		
Current Teaching Assignment	X	X		X	X		
Native Language (s)	X	X		X	X		
Veteran	X	X		X			
Number of years at this school	X	X		X			
Courses	X	X	X	X	X		
Workshop	X	X		X	X		
Schedule	X	X					
Special Projects	X	X		X	X		
Evaluation	X	X		X	X		
Completion of Program	X	X		X	X		

PART SIX

Student Data File

Student Data File Requirements

The term "student" in this project refers to the following classifications:

1. Graduate Interns
2. Undergraduate Volunteers
3. Professional Teachers and Staff
4. Community members

Information about the Teacher Corps student is of major concern to the project, IHE, LEA, network and National Teacher Corps. In addition, other potential users include the State Department of Education, Accrediting associations, U.S. Office of Education, and Congress. The need for student information exists because of:

1. Legal Requirements established relating to selection and project activities.
2. Establishment of student training program.
3. Student progress in the IHE, LEA, and the community.
4. Student impact and effectiveness in the LEA and the community.

Information Requirements

Although the type and format of student data required by various users will vary considerably in each request, it is possible to classify most of the data into five major categories:

1. Demographic
2. IHE Training Program
3. LEA Training Program
4. Community Program
5. Selection

Input Sources

Information relating to the student will be available from

several sources. The data will become available at different times throughout the project. However, it would be practical to specify when and how certain types of data are collected and entered in the Intern Data File. Some of the sources are:

1. Student Application
2. IHE Graduate Admission Forms
3. IHE Course of Study
4. Project related assignments
5. IHE Grade Reports
6. LEA Assignments and schedules
7. Special monthly and quarterly reports at the LEA
8. Community assignments and periodic reports
9. Project selection forms, records and reports
10. Special forms to serve a unique purpose

Output Documents

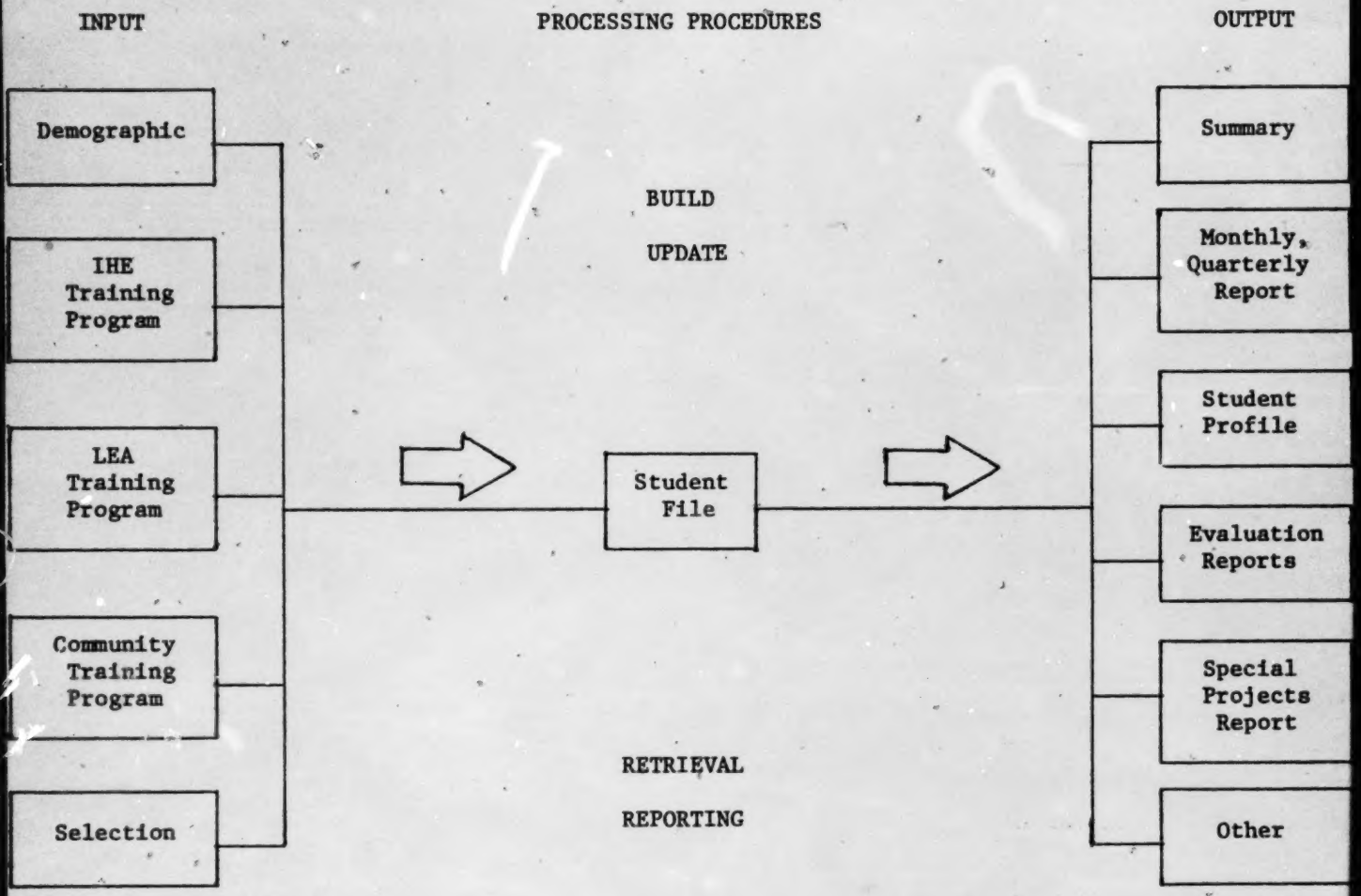
The input information recorded in the Intern File can be used to provide report information to authorized persons and organizations. The release of information about interns must be carefully guarded and made available only to properly authorized persons and organizations. In some instances, specific intern data may be released. In other instances, only intern group data in summary form may be released, thereby protecting the identity of individual interns. Data relating to interns may be in the form of:

1. Day-to-day requests, on a one time basis.
2. Weekly planning and operational reports at the Project level.
3. Monthly, quarterly and annual reports.

Data Collection and Output Forms

Example of forms - see Figure 7.

Figure 7. *STUDENT FILE



* 1. Graduate Interns
2. Undergraduate Volunteers
3. Professional Teachers and Staff
4. Community Members

Table 6. Student Data File Categories, Data Items, and Users

Data Items by Category	Users						
	T.C. Proj.	Natl. T.C.	T.C. Network	BIA LEA	IHE	Comm.	Other
Demographic							
1. Name	X	X	X	X	X		
2. Address	X	X		X	X		
3. Telephone	X			X	X		
4. Social Security Number	X	X					
5. Voting Registrate (State)	X	X					
6. Application	X	X					
7. Ethnic Group	X	X	X	X			
8. Sex	X	X	X				
9. Marital Status	X	X		X	X		
10. Age and Date of Birth	X	X					
11. Military Status	X	X	X	X	X		
12. Undergraduate degree & date	X	X			X		
13. Undergraduate University	X	X			X		
14. Previous experience	X	X			X		
15. Teacher certification	X	X					
16. Native Language (s)	X	X		X	X	X	
IHE Program							
1. Major - Minor	X			X	X		
2. Courses - Two year plan	X						
3. Credit Hours	X						
4. Grades							
5. Expected Graduation Date							
6. Extra Curricular Activity	X						
LEA Training Program							
1. Office Location	X						
2. Telephone number	X						
3. Assignments	X	X	X				
4. Hours - Daily or weekly	X	X					
5. Special Projects	X	X	X				
6. Instructional experiences	X	X	X				
7. Non-instructional experiences	X	X	X				
8. Evaluation data							
Community Training Program							
1. Assignments	X	X					
2. Hours	X	X					
3. Daily or weekly schedule	X						
4. Special Projects	X	X					
5. Evaluation data	X	X					
Deselection							
1. Deselection reason (s)	X	X		X	X		
2. Teaching position acquired	X	X					
3. Other employment acquired	X	X					

PART SEVEN

Instructional Program Subsystem Data File

This data file consists of a record for each program of courses provided by the IHE and the Project for the training of graduate interns, undergraduate volunteers, professional teachers, and community members.

Input Sources

Instructional program information is obtained from several sources. Some are:

1. Admission documents
2. Instructional program plans
3. Instructor's records
4. Organization transcript and records
5. Course outlines

Output Documents

Information stored in this data file is useful in providing various output documents. Some are:

1. Official instructional programs for the training of graduate interns, undergraduate volunteers, LEA professional staff and community members
2. Progress reports
3. Evaluation of instructional programs
4. Degree completion reports
5. In-service training reports
6. Number of persons trained and/or re-trained
7. Additional credit hours

Data Collection and Output Documents

Examples of the above.

Figure 8. INSTRUCTIONAL PROGRAM FILE

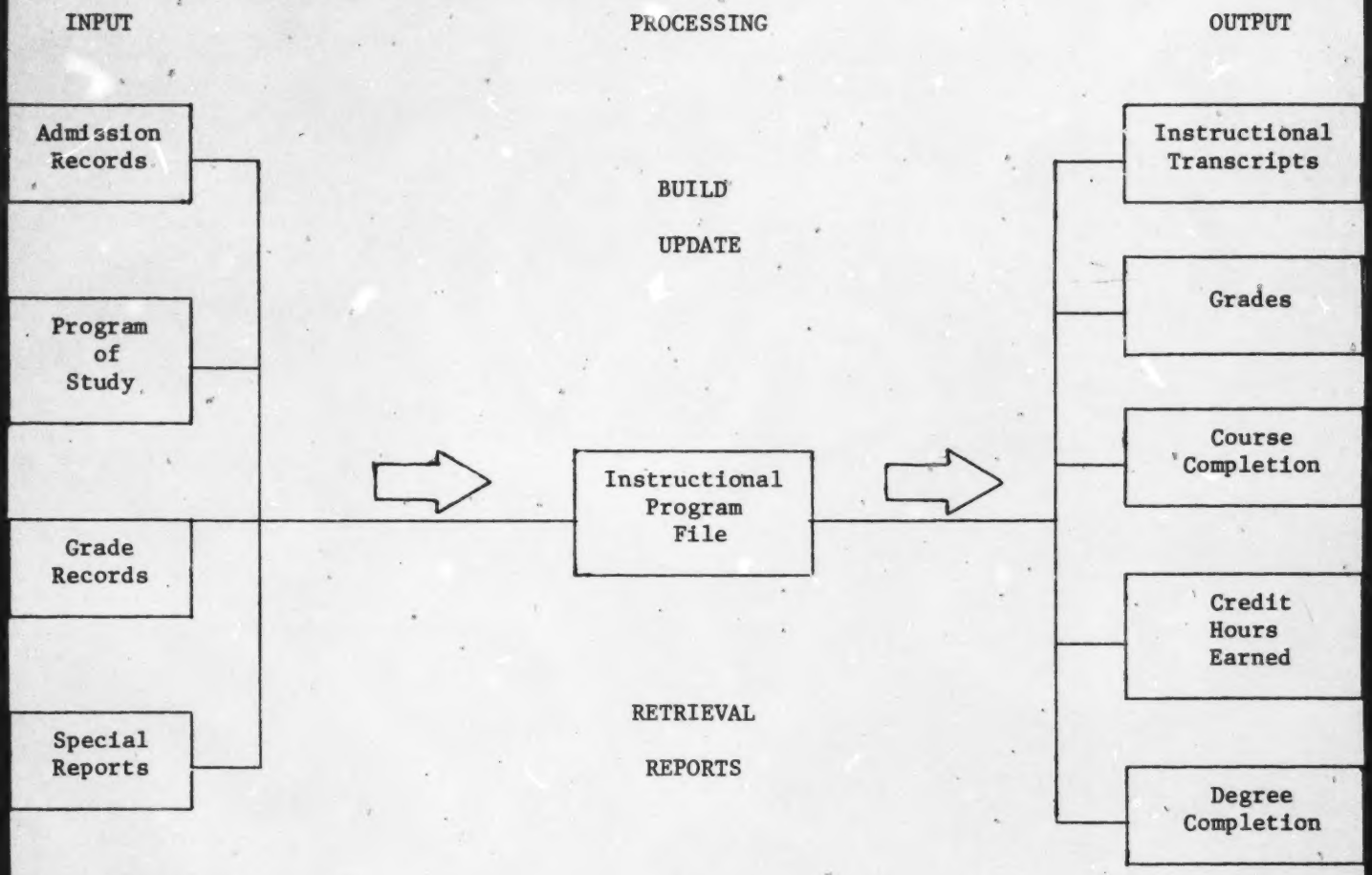


Table 7. Instructional Programs File Categories, Data Items, and Users

Data Items by Category	Users						
	T.C. Proj.	Natl. T.C.	T.C. Network	BIA LEA	IHE	Comm.	Other
Instructional Areas							
IHE							
Courses, Section No's	X	X	X		X		
Title	X	X			X		
Term Year	X	X			X		
Type of Program	X	X			X		
Credit Units	X	X			X		
Content of Courses	X				X		
Textbooks	X				X		
Schedule	X	X			X		
Degree	X	X			X		
LEA							
Schedule	X	X		X	X		
Intern Activities	X	X		X	X	X	
Workshop Courses	X	X		X	X		
Credit Hours	X	X					
Community							
Workshops	X	X		X	X	X	
Credit Hours	X	X		X	X	X	

PART EIGHT

Data Collection, Storage and Retrieval Considerations

A list of basic questions related to data collection, storage, and retrieval have served to guide and direct the development and implementation of the Dine Management Information System. They are:

Original Preparation (Source) and Processing

1. What is the location of the source data?
2. Who originates the source data?
3. Who prepares what source documents?
4. What form is the source data in at the original location?
5. How often is the processing performed?
6. How much time does the processing require at the original location?
7. Where is the processing performed?
8. What equipment and supplies are used?
9. How many copies are prepared?
10. Who receives the copies?
11. What is the volume range of the documents prepared? (Maximum to minimum)
12. What has the growth rate been historically?
13. Is there unused processing capacity?
14. Will Teacher Corps staff assistance be needed by the original data source in order to obtain needed information?
15. Does Teacher Corps MIS data needs impose a hardship upon the original source?

Form, Format and Timelines of the Documents

1. Is the document in a useful form as defined by its users?
2. Are there serious limitations?
3. Is exception reporting utilized?
4. Could one, two, or more reporting documents be combined?
5. Is the content accurate?
6. Is faster reporting desired?
7. What is the schedule of the form?
8. Will the usual schedule fit Teacher Corps data needs?

9. Will Teacher Corps data needs require new and/or special data forms, formats and time schedules?
10. Can Teacher Corps staff provide assistance in forms design?

Use of Documents

1. Who receives the document regularly?
2. Who receives the document sometimes?
3. Does information on the document require a decision? If so, what decision? By whom?
4. Is any part of the document not or rarely used?
5. Does the document lack certain key information?
6. What does the user do with the document?
7. Can Teacher Corps use the existing documents without change?
8. What is the routing of the document from the start to finish filing?
9. Does the document contain confidential information?
10. Who authorizes the release of confidential information?
11. Are there any constraints upon the future use or publication of the information?

Storage and Retrieval

1. Is the information or document retained? How? For how long?
2. Are procedures developed for retention and purging of stored data?
3. What is the schedule for file up-dating?
4. How large is the data file?
5. What is the growth rate of the file?
6. What is the retrieval procedure?
7. How active is the data file from the retrieval point of view?
8. Will the need for information by Teacher Corps Projects fit the storage and retrieval procedures?
9. Can certain data files be merged? Is there a need? Which files?
10. Is there special storage and retrieval supplies, materials, and/or equipment?
11. Is the storage and retrieval system manually operated? Machines? Computerized?
12. What are the safety factors relating to stored data? Fire? Flood? Etc.?

Cost

1. What costs are involved in processing the data?
2. What charge in cost will result from Teacher Corps requests for data?
3. Can costs be reduced through improved processing procedures? Equipment?
4. What is the cost of storage and retrieval?
5. Can Teacher Corps Projects assist suppliers with certain cost items?

Tools and Techniques of Data Collection

1. Interviewing
2. Questionnaires - Surveys
3. Flow Charts
4. Check Lists
5. Special Forms
6. Test Instruments
7. Research Designs
8. Statistical Treatments
9. Analysis and Interpretation

Project Impact/Change Information

Information collected, stored and processed in the subsystem data files also provide for the assessment of the Project's impact upon change in the IHE, LEA, personnel involved in the training and re-training, and students in the LEA. To record change, it is essential to obtain information about the organization and personnel prior to the start of the Project's program. A description of the IHE's graduate program, prior to the start of the Project, serves adequately in this area. Then, through periodic collection of change for the next two years, the Project will report its impact upon the IHE in terms of the IHE program, course development, and new curriculum materials. The same Procedure is used to provide information relating to change in the LEA, interns, teachers and students. The change information becomes an essential component of each subsystem data file.

Reports

A number of reports will be generated by the Project, IHE and LEA. Some of these reports are already in use. For these, each report should be reviewed for the purposes of:

1. Are the reports fulfilling the need?
2. Can the report be modified to improve upon its use?
3. Could new data be added or should some data be deleted?

No doubt new reports will be necessary in order to meet new needs for information. All new reports will be carefully designed and tested before broad useage by the Project. Care will be taken to identify:

1. Sources of information to be obtained in the report.
2. Best possible format for report completion at the original source of data.
3. Persons and/or organizations to receive the report and how best to present the information to them.
4. Number of copies of the report.
5. Instructions for the reports' completion.
6. File location of report.
7. The future use of the report.

Physical Storage of the MIS

The MIS for this Teacher Corps Project is to be developed and processed by manual means rather than automated through the use of a computer. Thus, data and hard copy records will be collected, processed, stored and retrieved by manual methods. The regular type steel filing cabinets with dividers and folders can adequately fill the storage needs for the Project's MIS data files. All data for each subsystem will be filed together for ease in future use.

Implementation

There were a number of steps accomplished by the Dine Teacher Corps Project to assure the successful implementation of the MIS. Although the initiation of each step in the implementation process may occur sequentially, some of the steps can proceed in parallel. It was important to review the general design to effect understanding of the problem and to preplan sufficiently to enable specifications to be written. Considerations for the implementation of an integrated information system included the following:

1. Review the general system design in the MIS.
2. Design a specific subsystem which satisfies a given set of specifications including problem definition, objectives, data items, system documentation, procedures, program specification and programs to produce needed reports.
3. Write instructions for the collection of the data and

procedures for the operation of the system.

4. Pilot test the complete system from the administration of collection documents to the production of output records.

5. Evaluate and review each step of the entire operation.

6. Revise the system, its specifications, instruction manuals, and/or production procedures where needed, as shown from the evaluation and review.